# **Statement of Basis Briefing Memorandum**

Great Lakes Gas Transmission Limited Partnership 130 West Superior Street Duluth, Minnesota 55802

NPDES Permit No.: MN-0052540-3

Receiving Water: Waters of the United States within the exterior boundaries of the Leech Lake and Fond du Lac Indian Reservations

# A. <u>Description of Activities</u>

Great Lakes Gas Transmission Limited Partnership (Great Lakes) operates a natural gas pipeline that serves portions of Minnesota. This permit covers activities related to the pipeline that are within the exterior boundaries of the Leech Lake Indian Reservation (Cass and Itasca Counties) and the Fond du Lac Indian Reservation (St. Louis and Carlton Counties).

	Milepost		Legal Locations				
Reservation	Begin	End	Township	Range	<u>Sections</u>		
			145N	32W	24, 25		
			145N	31W	19,28, 29, 30, 33, 34, 36		
			144N	31W	1, 2, 3		
			144N	30W	1, 2, 3, 4, 5, 6		
			144N	29W	2, 3, 4, 5, 6		
			145N	29W	35, 36		
			145N	28W	31, 32, 33, 34, 35, 36		
			145N	27W	31, 32, 33, 34, 35, 36		
			145N	26W	31, 32		
			144N	26W	1, 2, 3, 4, 5, 6		
			144N	25W	2, 6		
Leech Lake	160.94	203.61	145N	25W	31, 32, 33, 34, 35		
Leech Lake	207.10	207.53	144N	27W	26		
			50N	19W	22, 25, 26, 27, 36		
			49N	19W	1		
			49N	18W	6, 7, 8, 15, 16, 17, 22, 23, 26, 35, 36		
			48N	18W	1		
Fond du Lac	267.53	281.29	48N	17W	5, 6		

Great Lakes performs routine maintenance and inspection of the pipeline on a regular basis. Periodically, this results in the need to repair and/or replace portions of the pipeline. During the inspections, water from ground seepage and surface runoff may accumulate in the pipeline trench. When the accumulation hampers inspection, the trench will be dewatered. The end of the pump intake hose will be held above the bottom of the trench to minimize sediment withdrawal. Discharge will be done in a manner that prevents soil erosion and other nuisance conditions, and controls surface runoff. Discharge will be to a well vegetated upland or wetland using a filtration/energy dissipation device, typically either a geotextile filter bag or a straw bale dewatering structure. These devices are designed to prevent erosion and to remove solids/sediments from the discharge.

Where necessary to evaluate pipeline integrity consistent with U. S. Department of Transportation safety requirements, the discharge of hydrostatic test water may be necessary. Hydrostatic testing is a common means of evaluating the integrity of pipelines. During these tests, water is used as the testing medium rather than as a process stream. Because no additives are used, it is anticipated that the water used will not change significantly and thus, will reflect the characteristics of the source from which it was appropriated. Additionally, the permittee may desire to discharge hydrostatic test waters resulting from construction or maintenance projects such as piping modifications at compressor stations, construction of a meter station, or replacement of a section of pipe. Hydrostatic test water will be discharged to surface waters and/or in the manner described above.

Storm water discharges are expected where pipeline projects and construction activities require significant clearing and grading.

#### **Discharge Limitations:**

### A. <u>Hydrostatic Test Water</u>

### **Effluent Limitations and Monitoring Requirements**

The permittee is authorized to discharge hydrostatic test water. Such discharges shall be limited and monitored by the permittee as specified below:

<b>Parameter</b>	<b>Effluent Lim</b>	<u>itations</u>	<b>Monitoring Requirement</b>		
	Daily Min.	Daily Max.		<b>Frequency</b>	Sample Type
Total Discharge Volume (MG)		(Report)		Continuous	Calculation
Total Suspended Solids		30 mg/l		Daily	Composite
Dissolved Oxygen	5 mg/l			Daily	Grab
pH (standard units) Oil & Grease	6	9 10 mg/l		Daily Daily	Grab Grab

See item#6.b

Chlorine, Total Residual 0.038 mg/L Daily Grab

(See item # 7)

Treatment System,

Discharge and Receiving (Report) Continuous Visual

Water Inspection See item# 6

- 1. Representative samples Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge to the receiving waters.
- 2. Monitoring Location Samples and measurements taken in compliance with the monitoring requirements above shall be taken after treatment and prior to discharge into the receiving waters. For intake credits, receiving water body samples shall be taken mid-stream, mid-depth in the early morning hours. For determining maintenance of background (generally applicable to a discharge to a wetland), monitoring within the water body shall occur before and after the discharge at a point which would represent the discharge's impact on the receiving water body.
- 3. Monitoring Frequency The permittee shall take a minimum of three grab samples during each projects discharge. Grab samples shall be taken at the beginning, in the middle and at the end of each discharge event in which monitoring is required. Notwithstanding the foregoing, composite sampling may be used for total suspended solids.
- 4. Monitoring Methods The sampling procedures, preservation and handling, and analytical protocol for compliance monitoring shall be in accordance with EPA approved methods, 40 CFR Part 136.
- 5. Additional Monitoring If the permittee monitors any pollutant more frequently than required, using EPA approved methods, the results of such monitoring shall be included in the records.

#### 6. Outfall Observation:

- a. The permittee is required to have a representative on site for the duration of the discharge;
- b. The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge; Sampling for Oil and Grease will only be required if the discharge creates a visible color film or sheen on the receiving water surface.
- c. Any unusual characteristics, as described at item 6.b above, shall be recorded detailing the findings of the investigation and the steps taken to correct the condition.

- 7. The Total Residual Chlorine limit is only applicable if the source water used for the hydrostatic test has been chlorinated.
- 8. To avoid the transfer of invasive aquatic organisms, the permittee shall not transfer hydrotest influent water from one watershed divide to another. That is, intake from surface water source shall be returned to the same surface water body or water body within the same watershed.
- 9. For wetland discharges, pH levels in the waste stream shall not affect background. In lieu of monitoring the discharge pH, the permittee may monitor the pH levels in the wetland near the discharge before and after the discharge event. The same shall be done for Dissolved Oxygen (DO) monitoring for wetland discharges, where the discharge DO level is less than 5.0 mg/L.

## B. Trench Water

- A. All trench water discharge activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, inundation in wetlands causing significant adverse impact to the wetland.
- B. The permittee must ensure that discharge points are adequately protected from erosion and scouring. The discharge must be dispersed over natural rock riprap, sand bags, plastic sheeting or other accepted energy dissipation measures.
- C. The use of BMPs represents the minimum technology necessary to meet the 'pollutant removal' goal of the CWA. If the BMPs employed to minimize sediment withdrawal prove inadequate to avoid the discharge of pollutants at levels which will cause or contribute to a violation of a water quality standard, additional treatment measures shall be taken.
- D. Trench dewatering activities shall be conducted in such a manner as to avoid creating a turbid or sediment laden waste stream.
- E. Depending on the discharge rate of the pump and the existing conditions at the construction site, treatment practices such as the following shall be used for sediment control:
  - 1. Directing the dewatering discharge into an upland area with adequate vegetation which will serve to filter sediment from the water;
  - 2. Directing the dewatering discharge into a filter sump constructed from silt fence and straw bales. A sump may also be used to contain sediment from the dewatering operations under frozen soil conditions or in areas where vegetation is insufficient to filter the discharge; or
  - 3. Directing the dewatering discharge into a geotextile filter bag. Geotextile filter bags can be substituted for straw bale filtering structures and function in a similar fashion.

The end of the pump intake hose shall be held above the bottom of the trench to minimize sediment withdrawal.

# C. Storm Water

In 1987, Congress reauthorized the Clean Water Act (CWA). Section 402(p)(2) of the 1987 CWA requires NPDES permits for storm water discharges associated with industrial activity. EPA has defined storm water discharges associated with industrial activity to include storm water discharges from construction sites which disturb 1 or more acres (40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15)). The permittee will be required to develop and implement a Storm Water Pollution Prevention Plan and a Storm Water Management Plan. It should be noted that the storm water provisions in Chapter IV will only become applicable in the event that Ninth Circuit Court of Appeals vacates EPA's 2006 oil and gas construction storm water regulation. This regulation effectively exempted from NPDES permit requirements storm water discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities unless the relevant facility had a discharge of storm water resulting in a discharge of a reportable quantity of oil or hazardous substances.

Basis for limits: For storm water and trench water, best management practices will be used when necessary to prevent spoil or silt-laden water from leaving the project area or entering wetlands, surface waters, or drainage channels during and after the projects. Portions were taken from EPA's General Construction Stormwater Permit. Since there are no applicable effluent guidelines for this type of discharge, the effluent limitations and monitoring requirements for hydrostatic test water contained in this permit were developed using permit writer's judgment (PWJ) to protect state and tribal water quality standards where they are applicable and to be consistent with similar permits issued by the Minnesota Pollution Control Agency to similar dischargers. As such, the permitting authority is not estopped from establishing more stringent standards or monitoring in the event that the discharge is to a receiving stream where the permitting authority determines that additional or more stringent requirements and/or effluent limitations than those indicated in this permit may be necessary to substantially assure compliance with applicable regulations. The permitting authority shall apprise the permittee of these additional requirements, more stringent and/or additional effluent limitations, and/or water quality standards and then they shall become a part of the requirements applicable through this permit for the specific discharge. The permittee shall submit any additional information required by the permitting authority to assure that these additional requirements, more stringent and/or additional effluent limitations and/or water quality standards are being met.

EPA is the appropriate authority for purposes of certifying the proposed discharge under Section 401 of the Clean Water regarding discharges within the Leech Lake Indian Reservation. Clean Water Act Section 401 certification is not needed from the state or the Leech Lake Tribe as neither have water quality standards applicable to the receiving water at the points of discharge. Regarding discharges occurring within the Fond du Lac Indian Reservation, the Fond du Lac Band is responsible for 401 certification. On July 24, 2008, the Fond du Lac Band granted Clean Water Act section 401 water quality certification with conditions. We believe that the draft permit as written addresses the conditions put forth by the Band in its certification and believe it will be protective of applicable water quality standards.

### **Special Conditions**

• Advance Notice of Discharge-This permit is intended to cover discharges of trench water, storm water related to construction activities, and hydrostatic test water that may occur during the regular maintenance and inspection of the permittee's pipeline located within the exterior boundaries of the Leech Lake Indian Reservation and the Fond du Lac Indian Reservation. The requirements of the permit are general in nature and are intended to protect applicable water quality standards. However, since the receiving waters cannot be identified at this time, it is possible that additional requirements may be needed. Therefore, the permit requires the permittee to submit site-specific information to EPA and the Tribes prior to undertaking a project that would have a discharge covered by this permit. Unless more stringent requirements based on the site-specific information are required, the permittee can proceed with the project. If additional more stringent site-specific requirements are needed, after consultation with the Tribes and the permittee, EPA will inform the permittee by letter of the requirements prior to the project proceeding.

#### Prohibitions

- 1. **Prohibition on non-storm water discharges.** All discharges covered by this permit shall be composed entirely of storm water, uncontaminated trench dewatering, or hydrostatic test water. This permit does not authorize the discharge of sewage, wash water, scrubber water, spills, oil, hazardous substances, or equipment/vehicle cleaning and maintenance wastewaters to ditches, wetlands, or other surface waters of the U.S.
- 2. **Prohibition on the discharge of excessive sediments.** The discharge of sediments is prohibited, except in minor amounts associated with the proper implementation of sound soil erosion and sediment control practices.
- 3. Discharges Not in Compliance with Water Quality Standards. Discharges covered under this permit shall not cause or contribute to a violation of an applicable water quality standard. Where a discharge is determined to cause or contribute to the violation of an applicable Tribal or State Water Quality Standard, EPA, Region 5, will notify the permittee of such violation(s) and the permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard, and shall document these actions in a letter to EPA, Region 5. Compliance with this requirement does not preclude any enforcement activity as provided by the Clean Water Act for the underlying violation.
- 4. **Discharges to Municipal Wastewater Treatment Systems.** The permittee shall not transport pollutants to a municipal wastewater treatment system that will interfere with the operation of the treatment system or cause pass-through violations of effluent limits or water quality standards.
- 5. **Endangered Species.** Discharges and construction activities covered under this permit shall not adversely affect Federal listed endangered and threatened species or designated critical habitat. The permittee shall make every attempt to avoid

identified sensitive biological resources along the pipeline when establishing specific appropriations and discharge locations or implement the mitigation measures identified by the Minnesota Department of Natural Resources and the U.S. Fish and Wildlife Service.

- 6. Historic Properties. Discharges and construction activities covered under this permit shall protect historic properties that are listed or are eligible to be listed in the National Register of Historic Places. The permittee shall make every attempt to avoid previously identified sensitive cultural resources along the pipeline when establishing specific appropriations and discharge locations. If these sites cannot be avoided, there should be mitigation measures taken. Plans should reflect a treatment plan to mitigate potential adverse effects. Should any unreported cultural materials be discovered during project activities, all work shall cease and the Tribal Historic Preservation Officer (THPO) is to be notified immediately. Should any human remains or suspected human remains be encountered, all work shall cease and the following personnel should be notified immediately in this order: County Sheriff's Office, Office of the State Archeologist, and the THPO.
- 7. **Water Treatment and/or Chemical Additives(s).** The Permittee has not been approved for the use of water treatment and/or chemical additives.
- 8. **Outstanding Resource Value Waters/Trout Waters**. Discharges to outstanding resource value waters (ORVW), as defined in Minn. R. 7050.0180 or Tribal Water Quality Standards, or trout waters as defined in Minn. R. 7050.0420 or Tribal Water Quality Standards, <u>are prohibited</u>.
- 9. **Erosion, Flooding, and Nuisance Conditions.** The Permittee shall operate and maintain the discharge operation in such a manner so as to cause no erosion, flooding, or other nuisance conditions in the area of the operation or in the receiving stream.
- 10. **Construction/Installation.** This permit does not authorize the construction or installation of any pipeline facilities.
- 11. **Sediment Plumes.** Sediment levels in discharges from trench dewatering activities shall not cause, create, or contribute to a sediment plume in the receiving water.

# **ESA and NHPA Compliance**

Each year the permittee consults with the U.S. Fish and Wildlife Service (FWS) to review the Minnesota portion of its pipeline system for the presence of federally-listed species and critical habitat within 0.25 mile of the pipeline. The permittee uses the information provided from the FWS to establish conservation measures that would minimize or avoid impacts on the listed species during project activities. The species information and conservation measures are reviewed by the FWS and upon approval are implemented by the permittee for the next 12 months. Since protection of threatened and endangered species and its critical habitat is also a permit condition, we do not believe that the issuance of the permit and its associated discharges will an effect on those species, and therefore, we have met our requirements under the

Endangered Species Act (ESA).

As part of previous projects, the permittee has also performed archeological surveys of its pipeline system within the Leech Lake and Fond du Lac Reservations. The permittee consulted State and Tribal preservation Offices during those projects to assure the archeological sites and traditional cultural properties are avoided pursuant to the National Historic Preservation Act (NHPA). Since protection of archeological and cultural resources is also a permit condition, using the above-referenced resources, impacts to known sensitive resources would be avoided, and therefore, we believe that with the issuance of the permit and its associated discharges, no sensitive resources will be affected and have satisfied our requirements under the NHPA.

## Significant Changes from the Previous Permit

- 1. The storm water provisions in Chapter IV will only become applicable in the event that Ninth Circuit Court of Appeals vacates EPA's 2006 oil and gas construction storm water regulation.
- 2. Best management practices are required for trench water discharges. Monitoring for pH, oil and grease, and total suspended solids is no longer required.
- 3. Discharge monitoring reports are due the quarter after the discharge occurs. If no discharge occurs within a year, an annual report needs to be submitted stating that no discharge occurred during the year. This reduces the reporting burden for the permittee, but still meets the federal requirement of reporting at least annually.

The permit is based on applications dated March 12, 2008, and other information contained in the administrative record.

The permit will be issued for five years as allowed by regulation.

Written by: John Colletti September 2008

NPDES Programs Branch 77 West Jackson Blvd. Chicago, IL 60604 312-886-6106